

REMARKS

Applicants respectfully submit that entry of the above amendments under 37 C.F.R. §1.116 is proper because the amendments merely place the application in condition for allowance and in better form for appeal. Applicants also respectfully submit that the above amendments do not contain new subject matter and do not raise issues that would require a further search by the Office. Entry of the above amendments is respectfully solicited.

Claims 1-15 are presently pending in the Application. Claims 4, 7, 10, and 13-15 are currently amended, and claim 16 is canceled. No new matter is added to currently amended claims 4, 7, 10, and 13-15. Claims 1 and 7 are independent.

It is noted that any claim amendments are made to merely clarify the language of the claim, and not to distinguish the invention over the prior art, narrow the claims, or for any statutory requirements of patentability. Notwithstanding any claim amendments of the present Amendment or those Amendments that may be made later during prosecution, Applicants' intent is to encompass equivalents of all claim elements. Reconsideration in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1-16 are rejected under 35 U.S.C. §102(e) as anticipated by U.S. Patent No. 6,535,906 to Barber et al. (hereinafter, Barber).

This rejection is respectfully traversed in view of the following discussion.

I. THE CLAIMED INVENTION

Applicants' invention, as defined in independent claim 1, is directed to a method for reducing facsimile page errors due to packet loss in facsimile transmission over a packet network that comprises receiving facsimile image data packets from a packet network, reassembling the received packets, parsing the assembled packets into scan line data of the facsimile image, evaluating the scan line data to detect the expected end of a scan line without packet loss, playing out the scan line data to a local Facsimile Terminal Equipment (FTE), if the scan line data has no packet loss, and discarding the scan line data if the scan line data has packet loss.

Applicants' invention, as defined in independent claim 7, is directed to a device for reducing facsimile page errors due to packet loss in facsimile transmission over a packet network that comprises a gateway for receiving facsimile image data packets from a packet network, and a processor for reassembling the received packets, parsing the assembled packets into scan line data of the facsimile image, evaluating the scan line data to detect the expected end of a scan line without packet loss, playing out the scan line data to a local Facsimile Terminal Equipment (FTE), if the scan line data has no packet loss, and for discarding the scan line data if the scan line data has packet loss.

II. THE PRIOR ART REJECTION

THE BARBER REFERENCE

Fig. 3 of Barber discloses a process of storing document data in a buffer, in which data packets having the document data are received at the input of a gateway (col. 4, lines 18-21). Document data for a fax document includes a plurality of scan lines that each represent a line of the document and each scan line includes a plurality of bits that are followed by an end of scan line indicator ("end of scan line marker") (col. 4, lines 22-26). The data packets may comprise header data and scan line data for the document (col. 4, lines 26-27). Each packet may include a different amount of scan line data that does not necessarily include a complete scan line (col. 4, lines 28-29).

Scan lines are reconstructed by removing header data from the received data packets and forwarding the scan line data to a line generator (col. 4, lines 32-35). The line generator consequently locates the beginning and end of each scan line, thus reconstructing the scan lines of the document (col. 4, lines 36-38). Once regenerated, each scan line is stored in the buffer (step 304), thus ending the storing process (col. 4., lines 40-41).

Fig. 4 of Barber shows a process of removing document data from the buffer for transmitting an entire document to the receiving fax machine (col. 4, lines 49-51). The process begins at step 400 in which a preselected amount of a given scan line ("line segment") is removed from the buffer by a data processor (col. 4, lines 53-55). The

size of the line segment and frequency of data removal from the buffer is selected ensure that a preselected data rate (e.g., 28.8 kbps) can be maintained by the data pump (col. 4, lines 55-58).

Once the line segment is removed, the process continues to step 402 in which it is determined if an end of line marker is detected in the line segment (col. 4, lines 61-63). If no such marker is detected, then the process continues to step 404 in which the line segment is added to an outgoing data stream that is transmitted to the receiving fax machine by the data pump (col. 4, lines 63-66) (emphasis added).

Returning to step 402, if it is determined that an end of marker is within the line segment, then the process continues to determine if the total amount of data in the buffer is within a preselected range size (col. 5, lines 3-6).

Claims 1 and 7 recite at least the features of "evaluating said scan line data to detect the expected end of a scan line without packet loss; playing out said scan line data to a local Facsimile Terminal Equipment (FTE), if said scan line data has no packet loss."

In Barber, document data comprising headers, and beginning and ends of scan lines are regenerated from received packets by a line generator and stored in a buffer. A preselected amount of a given scan line, i.e., a line segment, is then removed from the buffer by a data processor. Once the line segment is removed, it is determined if an end of line marker is detected in the line segment. If no such marker is detected, then the line segment is added to an outgoing data stream that is transmitted to the receiving

fax machine by the data pump. That is, Barber will transmit a line segment to the receiving fax machine even when an end of line marker for the scan line is not detected because Barber seeks to maintain a preselected rate of data transmitted by the data pump to the receiving fax machine.

In contrast, the present invention evaluates a scan line (not a line segment) determined by an end of scan line, for either packet loss or packet non-loss. If the end of the scan line is detected and there is no packet loss, then the scan line data is played out to the local Facsimile Terminal Equipment (FTE). If the end of scan line is detected and there is packet loss, then the scan line is discarded. Unlike Barber, the present invention cannot play out a portion of a single scan line, i.e., a line segment, to the FTE.

Therefore, Barber does not disclose, or render obvious, "evaluating said scan line data to detect the expected end of a scan line without packet loss; playing out said scan line data to a local Facsimile Terminal Equipment (FTE), if said scan line data has no packet loss" as recited in claims 1 and 7 because Barber transmits facsimile data of a line segment to the receiving fax machine before determining if the line segment contains an end of line marker, in order to maintain a preselected rate of data transmitted by the data pump to the receiving fax machine.

For at least the reasons outlined above, applicants respectfully submit that Barber does not disclose, teach or suggest every feature of claims 1 and 7. Accordingly, Barber does not anticipate, or render obvious, the subject matter of claims

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1 and 7 and claims 2-6 and 8-15, which depend from claims 1 and 7, under 35 U.S.C. §102(e). This Amendment cancels claim 16; hence the rejection of claim 16 is moot. Withdrawal of the rejection of claims 1-16 under 35 U.S.C. §102(e) as anticipated by Barber is respectfully solicited.

III. INFORMAL MATTERS AND CONCLUSION

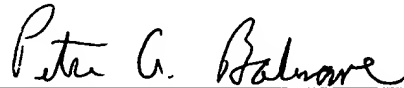
In view of the foregoing, Applicant submit that claims 1-15, all the claims presently pending in the Application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above Application to issue at the earliest possible time.

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Should the Examiner find the Application to be other than in condition for allowance, the Examiner may contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview. The commissioner is hereby authorized to charge any fees associated with this communication to Client's Deposit Account No. 20-0668.

Respectfully Submitted,

Date: 8/2/04



Peter A. Balnave, Reg. No. 46,199
Joseph J. Zito, Reg. No. 32,076
Customer No. 23494
Local Telephone: (301) 601-5010

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: the Commissioner for Patents, United States Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450
on August 2, 2004.

 8/2/04
Peter A. Balnave Date